

CLAIMS

Sub A

1. A microphone assembly comprising:

a front inlet tube;

a rear inlet tube;

a microphone cartridge having a front inlet port acoustically

5 coupled to the front inlet tube and a rear inlet port acoustically coupled to the rear inlet tube;

an actuator switch being movable between a first position in which the rear inlet tube is plugged and a second position in which the rear inlet tube is unplugged; and

10 circuitry for sensing whether the actuator switch is in the first position or the second position, and for selecting an output based upon the position sensed.

2. The microphone assembly of claim 1 wherein the circuitry comprises an electronic contact and sensor switch.

3. The microphone assembly of claim 2 wherein the electronic contact and sensor switch comprises first and second conductors.

4. The microphone assembly of claim 3 wherein the actuator switch has an electrical contact mounted therewith for providing electrical conduction between the first and second conductors when the actuator switch is in one of the first and second positions.

5. The microphone assembly of claim 1 wherein the circuitry selects an non-equalized output when the actuator switch is in the first position, and an equalized output when the actuator switch is in the second position.

6. The microphone assembly of claim 4 wherein the circuitry selects a non-equalized output when the actuator switch is in the first position in response to conduction between the first and second conductors provided by the electrical contact, and wherein the circuitry selects an
5 equalized output when the actuator switch is in the second position in response to no conduction between the first and second conductors.

7. The microphone assembly of claim 1 wherein the circuitry selects an output having higher gain when the actuator switch is in first

position, and an output having lower gain when the actuator switch is in the second position.

8. The microphone assembly of claim 1 wherein the circuitry selects an output having lower environmental noise reduction when the actuator switch is in the first position, and an output having higher environmental noise reduction when the actuator switch is in the second position.
- 5

9. The microphone assembly of claim 1 further comprising a housing, and wherein the circuitry is at least partially integral to the housing.

10. The microphone assembly of claim 1 wherein the circuitry is at least partially integral to the microphone cartridge.

11. The microphone assembly of claim 1 wherein the output selected is input to hearing aid circuitry.

12. A microphone assembly comprising:

a microphone cartridge having a diaphragm;

a first inlet tube acoustically coupled to a first side of the
diaphragm;

5 a second inlet tube acoustically coupled to a second side of the
diaphragm;

an actuator switch being movable between a first position in which
the second inlet tube is plugged and a second position in which the second
inlet tube is unplugged; and

10 circuitry for selecting a first output when the actuator switch is in
the first position, and a second output when the actuator switch is in the
second position.

13. The microphone assembly of claim 12 wherein the circuitry
comprises an electronic contact and sensor switch having first and second
conductors.

14. The microphone assembly of claim 13 wherein the actuator
switch has an electrical contact mounted therewith for providing electrical
conduction between the first and second conductors when the actuator
switch is in one of the first and second positions.

15. The microphone assembly of claim 12 wherein the first output comprises a non-equalized output and the second output comprises an equalized output.

16. The microphone assembly of claim 14 wherein the first output comprises a non-equalized output and is selected in response to conduction between the first and second conductors provided by the electrical contact, and wherein the second output comprises an equalized
5 output selected in response to no conduction between the first and second conductors.

17. The microphone assembly of claim 12 wherein the first output has a first gain value and the second output has a second gain value.

18. The microphone assembly of claim 12 wherein the first output has an first environmental noise reduction amount and the second output has a second environmental noise reduction amount.

19. The microphone assembly of claim 12 further comprising a housing, and wherein the circuitry is at least partially integral to the housing.

20. The microphone assembly of claim 12 wherein the circuitry is at least partially integral to the microphone cartridge.

21. The microphone assembly of claim 12 wherein the output selected is input to hearing aid circuitry.

22. A method of operating a microphone comprising:
plugging a sound inlet tube;
sensing that the sound inlet tube is plugged;
selecting a first output based on sensing that the sound inlet tube is

5 plugged;

unplugging the sound inlet tube;
sensing that the sound inlet tube is unplugged; and
selecting a second output based on sensing that the sound inlet tube is unplugged.

23. The method of claim 22 further comprising inputting the selected output to hearing aid circuitry.

24. A method of operating a microphone comprising:
receiving an actuator switch in a first position in which a sound inlet tube is plugged;
sensing that the actuator switch is in the first position;
5 receiving the actuator switch in a second position in which the sound inlet tube is unplugged;
sensing that the actuator switch is in the second position; and
selecting a first output if the actuator switch is in the first position and a second output if the actuator switch is in the second position.

25. The method of claim 24 further comprising inputting the selected output to hearing aid circuitry.

26. A method of operating a microphone comprising:
plugging a sound inlet tube;
unplugging the sound inlet tube;
sensing whether the sound inlet tube is plugged or unplugged; and

5 selecting an output based on the sensing.

27. The method of claim 26 further comprising inputting the selected output to hearing aid circuitry.